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Title: Agent Inferencing Meets the Semantic Web

Abstract: We provide all agent; the capability to infer the relations (assertions) entailed by the rules that, describe the formal semantics of art RDFS knowledge-base. The proposed inferencing process formulates each semantic restriction as a rule implemented within a, SPARQL query statement. The process expands the original RDF graph into a fuller graph that. explicitly captures the rule's described semantics. The approach is currently being explored in order to support descriptions that follow the generic Semantic Web Rule Language. An experiment, using the Fire-Brigade domain, a small-scale knowledge-base, is adopted to illustrate the agent modeling method and the inferencing process.

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